SCOTTISH QUALIFICATIONS AUTHORITY

PC Passport

SPREADSHEET — Advanced
Instructor's Guide

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This guide makes up part of a suite of three documents designed to deliver the PC Passport course at Advanced level for Spreadsheet

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Welcome

Welcome to the Advanced Spreadsheet course. The Student Workbook for this course is designed to teach the topics required for the assessment of this Unit. The companion Exercise Booklet contains practical exercises that will reinforce the topics taught in the Workbook as well as Summary Tasks for each Learning Outcome. It is expected that the tutor leading the learner will supplement these materials with some practical assignments that are appropriate to their group.

This Instructor's Guide explains the layout and use of these manuals and gives the answers to the questions and tasks included in the Exercise Booklet.

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Using the Student Workbook

The workbook has been organised into the three Learning Outcomes for this Unit. Each of these 'sections' contains the topics to be covered along with references to the practical exercises that the learner should complete at specific points. At the end of the 'section' there is a reference to that Learning Outcome's *Summary Tasks*, which usually take the form of small projects, to help the learner consolidate what they've learned.

The references to the exercise booklet look like this:

Exercise 1.1

Now do Exercise 1.1 in the Student Exercise Booklet.

Summary Tasks

Now do the Learning Outcome 1 Summary Tasks in the Exercise Booklet.

Using the Exercise Booklet

The Exercise Booklet contains the practical sessions that the learners should undertake to consolidate their learning. Throughout each of the Learning Outcomes there are a number of exercises that will cover the topics most recently taught, and at the end of each Learning Outcome there is a Summary Tasks section. Here is a sample Summary Task from this Unit:

Task 3

1. Use the search facility in Windows Explorer to find the **Salary Analysis** file.
2. Choose to cut this document from the folder in which you find it.
3. In your **PersonalStuff** folder, create a new folder called **Salary** and paste the **Salary Analysis** file into it, using whatever method you prefer.
4. Rename the **Salary** folder as **Financial Documents** and move the **Loan Calculator** and **Credits** workbooks from the **Financial** folder in your **WorkStuff** folder into it.

Exercise Files

Most of the practical exercises and Summary Tasks in the Student Exercise Booklet ask the learner to open specific files. These files are supplied with this pack. If possible, a copy of these files should be placed on the hard disk (the C drive) on the system the learner will use. However the exercises instruct the learner to find out where these files have been placed if they do not have access to the C drive.

A copy of the Unit exercise folder with the practical sessions completed has been supplied for the use of teaching staff. This folder is named **SS —— Advanced — Completed Versions**.

Answers to Written Exercises

Learning Outcome 1

Exercise 1.1

File formats — revision exercise

Question 1

File, Save As, Save as Type

Question 2

.jpeg	Graphic
.wav	Sound
.mpeg	Video
.tiff	Graphic
.sit	Compressed
.avi	Video
.mp3	Sound
.gif	Graphic
.zip	Compressed
.png	Graphic

Question 3

Tool, Option, Transition tab, Save Excel Files As

Question 4

.doc, .mdb, .ppt

Question 5

.txt **Text files**	♦ Only the text and results of calculations are saved. ♦ You lose all formatting, graphics, objects and other contents from the file. ♦ Normally you would use the **Text (Tab-delimited) (*.txt)** file type. ♦ When you use this type, the resulting file contains all the text with each row from the worksheet shown on a new line, and with tab characters between the columns. ♦ Files of this type have a **.txt** extension on their names. ♦ If you're saving a text file for a Macintosh computer user, use the **Text (Macintosh) (*.txt)** file type.
.csv **Comma Separated Value**	♦ Saves text and results of calculations, with the rows on separate lines and the columns separated with commas. ♦ Files that use this format can be identified by their **.csv** file name extension. ♦ If you're saving a CSV file for a Macintosh computer user, use the **CSV (Macintosh) (*.csv)** file type.
.slk **Symbolic Link (SYLK) files**	♦ The text and the *formulas* are saved along with limited formatting. ♦ If any part of a formula is not supported by the SYLK format, the result of the calculation, rather than the formula used to calculate it, will be saved in the SYLK file. ♦ Files that use this format can be identified by their **.slk** file name extension.

Exercise 1.2

File protection

Question 1

Worksheet or workbook protection.

Question 2

Prohibits formulas and functions being displayed in formula bar when cell selected.

Question 3

- Locked status — prevents accidental data entry/edit of cells that contain standard text or formulas/functions.
- Hidden status — prevents user from seeing exactly what calculations performed on data — may be useful when user entering sensitive data, eg pay/bonus data.

Question 4

Tools, Protection, Protect Sheet or Protect Wordbook.

Question 5

Would mean that the feature could not be switched off unless you know the password.

Question 6

Save As dialog box, Tools, General Options — specify passwords for file sharing.

Question 7

Password to open, and Password to modify

Exercise 1.3

Finding files — review/advanced

Answers may vary, depending on whether or not additional files have been added to or modified in folder structure used.

Question 1

3

Question 2

4

Question 3

13

Question 4

2

Question 5

Zedco Stocks; B14:B15 and B18:B19.

Question 6

Credit Card Details in the Household Folder.

Learning Outcome 1 — Summary Tasks

None of the Summary Tasks in this section require answers.

Learning Outcome 2

Exercise 2.1

Formatting

	A	B	C
1	Spending money		150
2			
3		Exchange rate to the £	Value of spending money
4	Euros	1.38754	=$C$1*B4
5	Dollars	1.6385	=$C$1*B5
6	Estonian Kroon	21.715	=$C$1*B6
7	Indian Rupee	76.89808	=$C$1*B7
8			

Exercise 2.2

Absolute/Relative Cell referencing

		True or False?
By default, all cell addresses are	Relative	False
The keyboard shortcut used to change F4 to $F$4 in a formula is	Shift [F4]	False
$B7 in a formula in C7 copied to cells C8:C10 will become	B8:B10	False
A$9 in a formula in F9, copied to cells G9:I9 becomes	B$9:D$9	True

Exercise 2.3

Review of Absolute/Relative cell addressing and statistical functions

	A	B	C	D
1	**Furniture Sale**			
2				
3	**Everything reduced by**		**0.4**	RRP
4				
5	**Item**	**RRP**	**Sale Price**	**Saving**
6	Desk	300	=B6*$C$3	***=B6-C6***
7	Chair	195	=B7*$C$3	***=B7-C7***
8	Table	360	=B8*$C$3	***=B8-C8***
9	Bed	400	=B9*$C$3	***=B9-C9***
10				
11	**Cheapest Sale price**		=MIN(C6:C9)	
12	**Most Expensive Sale price**		=MAX(C6:C9)	
13	**Average sale price**		=AVERAGE(C6:C9)	
14				
15	**Number of items in sale**		=COUNT(C6:C9)	
16				

	A	B	C	D	E
1	***Christmas Pay Details***				
2	*Pay date*		*Finishing time*		
3	***38708***		***0.541666666666667***		
4	*Employee name*	*Hours worked*	*Basic wage*	*Total including Bonus*	
5	Peter Wilson	5	=B5*$B$13	=C5+$B$14	
6	Alison Brandt	8	=B6*$B$13	=C6+$B$14	
7	Gill Peterson	3	=B7*$B$13	=C7+$B$14	
8	Andrew Thomas	2	=B8*$B$13	=C8+$B$14	
9					
10	**Total wages bill for month**		**=SUM(C5:C9)**	**=SUM(D5:D9)**	
11					
12					
13	**Hourly Rate**	**4.5**			
14	**Christmas Bonus**	**25**			
15					

Exercise 2.6b

DCOUNT

No of members over 35	10
No of members 50 or over	3
No of members who paid before 1 May 04	10
No of members who paid after 1 May 04	5

Exercise 2.6c

DSUM

Oldcastle membership fees	£550
Alverston membership fees	£600
Blackwell membership fees	£1447

Exercise 2.6d

DAVERAGE

What is the average age of members living in Oldcastle?	33
What is the average age of members living in Alverston?	32
What is the average age of members living in Blackwell?	47

Exercise 2.6e

DMIN/DMAX

What is the maximum age of members living in Oldcastle?	49
What is the maximum age of members living in Alverston?	24
What is the minimum age of members living in Blackwell?	17

Learning Outcome 2 — Summary Tasks

None of the Summary Tasks in this section require answers.

Learning Outcome 3

Exercise 3.1

Lists and Dataforms

	A	B	C	D	E	F	G
1	STUDENT						
2	Firstname	Surname	Computing	Maths	English	Average	Course Result
3	Jack	Anderson	77	82	80	=AVERAGE(C3:E3)	=IF(F3>=50,"Pass","Fail")
4	Peter	Borthwick	55	20	55	=AVERAGE(C4:E4)	=IF(F4>=50,"Pass","Fail")
5	Alison	Evans	82	75	76	=AVERAGE(C5:E5)	=IF(F5>=50,"Pass","Fail")
6	Adam	Ferguson	79	68	38	=AVERAGE(C6:E6)	=IF(F6>=50,"Pass","Fail")
7	Gill	Ferguson	45	51	52	=AVERAGE(C7:E7)	=IF(F7>=50,"Pass","Fail")
8	Paul	Morris	45	39	52	=AVERAGE(C8:E8)	=IF(F8>=50,"Pass","Fail")
9	Paul	Nixon	55	62	92	=AVERAGE(C9:E9)	=IF(F9>=50,"Pass","Fail")
10	Val	Peters	91	86	64	=AVERAGE(C10:E10)	=IF(F10>=50,"Pass","Fail")
11	Jack	Thomson	36	52	55	=AVERAGE(C11:E11)	=IF(F11>=50,"Pass","Fail")
12							
13	Lowest Mark		=MIN(C3:C10)	=MIN(D3:D10)	=MIN(E3:E10)		
14	Highest Mar		=MAX(C3:C10)	=MAX(D3:D10)	=MAX(E3:E10)		
15	Average Ma		=AVERAGE(C3:C10)	=AVERAGE(D3:D10)	=AVERAGE(E3:E10)		

Exercise 3.3

Advanced Filter

Passed Computing but failed the course:

Firstname	Surname	Computing	Maths	English	Average	Course Result
		>=50				Fail
Firstname	Surname	Computing	Maths	English	Average	Course Result
Peter	Borthwick	55	20	55	43	Fail

Achieved 65 or more in each subject:

Firstname	Surname	Computing	Maths	English	Average	Course Result
		>=65	>=65	>=65		
Firstname	Surname	Computing	Maths	English	Average	Course Result
Jack	Anderson	77	82	80	80	Pass
Alison	Evans	82	75	76	78	Pass

Scored between 50 and 70 (inclusive) in Computing:

Firstname	Surname	Computing	Computing	Maths	English	Average	Course Result
		>=50	<=70				
Firstname	Surname	Computing	Maths	English	Average	Course Result	
Peter	Borthwick	55	20	55	43	Fail	
Paul	Nixon	55	62	92	70	Pass	

Averaged either below 50 or 80 and above:

Firstname	Surname	Computing	Maths	English	Average	Course Result
					<=50	
					>=80	
Firstname	Surname	Computing	Maths	English	Average	Course Result
Peter	Borthwick	55	20	55	43	Fail
Gill	Ferguson	45	51	52	49	Fail
Paul	Morris	45	39	52	45	Fail
Val	Peters	91	86	64	80	Pass
Jack	Thomson	36	52	55	48	Fail

Exercise 3.4

Scenarios

What if

- Option 2 at £353.42

Exercise 3.5

Goal Seek

- Hourly rate £5.56, or number of hours 16.23.

Learning Outcome 3 — Summary Tasks

None of the Summary Tasks in this section require answers.